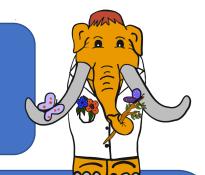
# Science Saturday @ Home Making a Grasshopper Model





### Gathering Supplies:

Cardboard Tube Green or Brown Paint

Scissors Pipe Cleaner

Markers Glue

Grasshopper Printable or construction paper

Glue Googly Eyes (optional)

## How To Steps:

Lets make a diagram of a grasshopper while we explore insects!

- 1. Take a cardboard tube about 4 inches long and paint it green or brown. Grasshoppers are colors that blend in with the plants that they eat. This works as camouflage, hiding them from predators that might eat them.
- 2. While that is drying, print out the grasshopper printable that has the parts of the grasshopper on it or take a piece of construction paper and draw the different parts of the grasshopper using the printable as your guide.
- 3. Cut out each part and color with a marker to match the tube.
- 4. Look at the diagram of the grasshopper in the Did You Know section or the photos with Max if you need help with where to glue the parts onto the tube.
- 5. Cut pieces of pipe cleaner for the feet and antennae. Attach the antennae to the back of the head piece before attaching to the tube. The four pipe cleaner legs go under the front half of the tube. The two large paper legs are glued to either side of the back half of the tube.
- 6. The wings and thorax are glued to the top of the tube.
- 7. Now you have a model of a grasshopper!

## Max and His Grasshopper





#### Pid You Know?

There are over 11,000 different species of Grasshopper! They live all over the world; except in very cold areas like the north and south poles. Grasshoppers are herbivores, meaning that they eat plants like grass and leaves. They can be a problem to humans when they get into farmers' crops. A large group of grasshoppers can eat a whole field of crops in a short period of time.

Grasshoppers have a hard outer covering called an exoskeleton that helps to protect them. They also have strong hind legs that allow them to jump up to 20 times their body length! They do not have ears but instead have a tympanal organ located in their abdomen which works just like an ear drum.

They have two sets of wings with the outer set a harder shell to protect the lower set of wings. Some grasshoppers can fly using their wings while other species use them to help propel their hops farther.

In many parts of the world grasshoppers are eaten by humans and are a very good source of protein.

